

Liquefied Natural Gas

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Why is WSDOT Ferries Division Exploring LNG?

- To save money -- the delivered price of LNG to the vessel by tank truck has been quoted as \$0.85 to \$1.32 per gallon. For comparison, delivered diesel fuel, which uses a 1.7 multiplier, costs \$1.45 to \$2.24 per gallon.
- As of Aug. 2012, the current price of delivered ultra low sulfur diesel is \$3.98 per gallon.
- The fuel cost savings moving from diesel to LNG is approximately 40-50% at today's pricing.
- Cost modeling assumes trucking of LNG from Fortis plant in Vancouver area.

Why is WSDOT Ferries Division Exploring LNG?

- To reduce emissions -- the emissions reductions from a Tier 2 diesel propulsion engine to a natural gas engine are:
 - NOx – At least 90% reduction
 - PM – Approximately 100% reduction
 - SOx – Approximately 100% reduction
 - CO2 – Approximately 20% reduction

Fuel Expenditures

- WSF burns over 17 million gallons of fuel each year.
- Fuel is the fastest growing operating expense at nearly 30% of the operating budget; compared to 12% in 2000
- WSF's fuel budget today is \$67.3 million, which is \$51.7 million more than it was 12 years ago.

Concept Approval

WSF has received conceptual approval from the U.S. Coast Guard to retrofit the propulsion system with new engines on the six Issaquah Class vessels and the new Olympic Class ferries.

Next Steps

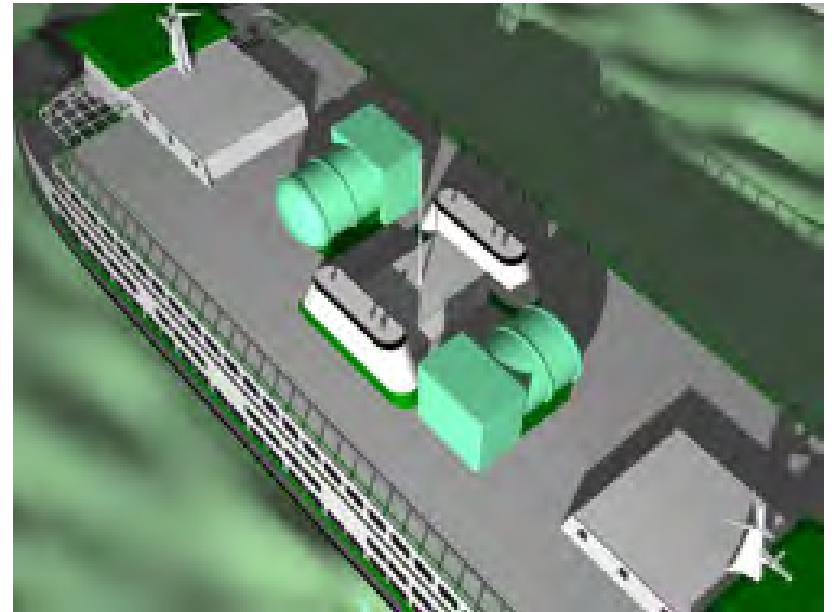
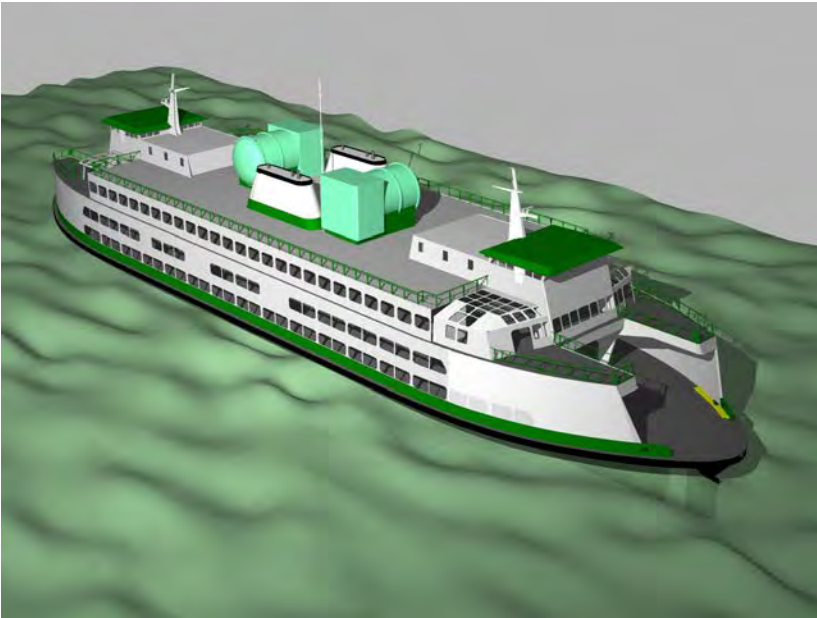
Safety and Security Assessments

- WSF will hire a consultant to conduct safety and security assessments and preliminary operational planning (Aug 2012).
- Meet with USCG to review methodology and timeframe for assessments (Sept 2012).
- U.S. Coast Guard establishes peer review group (Oct 2012).
- Draft assessment available (Nov 2012).
- Peer review group reviews assessment and provides WSDOT Ferries Division with findings (Jan 2013).

Design/Build LNG Propulsion System

- Advertise Request For Proposals (RFP) for a Design/Build LNG Propulsion System For Six Issaquah Class Ferries (Aug 2012).
- Issue RFP (Sept 2012).

Renderings



Questions?

For additional information or questions, please contact:

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